Unix Tutorial Digest: monthly digest of Unix/Linux topics

Thanks to the super busy January, this is actually the first Unix Tutorial digest of 2019! Lots of news and so many things to follow up and test now!

As always, Please get in touch if you want to suggest a useful link for the next digest.

Unix and Linux News

- Linux kernel 4.20
- Ubuntu Core 18.10 got released – sounds like a pretty cool idea for IoT things. I must try it on one of my Raspberry Pi systems, but it seems it won’t work on Raspberry Pi Model 1.
- I seem to have forgotten Red Hat Enterprise Linux 8 beta in my previous digest
- **Bash 5.0 got released!** Not just any software, but one of the most popular Unix shells!

## Software News

- **LetsEncrypt** (my SSL provider of choice for all the self-hosted elements) reported [2018 progress and LetsEncrypt 2019 plans](#) – 150M websites are using them now, impressive!
- in mid January, [4 issues with SCP in OpenSSH, Putty and WinSCP were discovered](#). Hope you were not affected!
- **Were you affected by the DNS Flag Day on February 1st?** Great initiative to highlight dependency on DNS and to steer users towards better implementations of it.
- **Wine 4.0 got released**, quickly followed up by **Wine Staging 4.0**.
- **Kodi 18 platform got released**, followed by **LibreELEC 9.0.0** based on it

## Interesting and Useful

- **Scraping TripAdvisor: text mining and sentiment analysis** – can’t believe how simple and readable the Python code is for a task of such complexity

## Unix Tutorial articles

I made some New Years’ resolutions, one of them is a dramatically improved commitment to updating Unix Tutorial. As the result, I published more content in January 2019, than in the previous 9 years!

- **Happy New Year 2019!**
- **ISO to USB in MacOS**
- **Test TCP connectivity with curl**
- **VirtualBox 6.0**
That’s it for today!

See Also

- Unix Tutorial Digest
- Unix commands
- Basic Unix commands
- Advanced Unix commands
If you’re lucky to be working with a recent enough version of Red Hat Enterprise Linux (RHEL) – namely, anything after RHEL 5.7 and RHEL 6.1, then you should know what software subscriptions are and how to list them.

List active subscriptions in Red Hat

`subscription-manager` is a Linux command in RHEL, you run it with the list option to show what current subscriptions are active for your server.

Here’s how this looks on my recently build RHEL8 beta virtual machine:

```
[root@rhel8 ~]# subscription-manager list
+-------------------------------------------+
| Installed Product Status                  |
+-------------------------------------------+
| Product Name: Red Hat Enterprise Linux for x86_64 Beta |
| Product ID: 486                            |
| Version: 8.0 Beta                          |
| Arch: x86_64                               |
| Status: Subscribed                        |
| Status Details:                            |
| Starts: 23/11/18                           |
| Ends: 22/11/19                             |
```

[ ]
Installed Product Status
+-------------------------------------------+
Product Name: Red Hat Enterprise Linux for x86_64 Beta
Product ID: 486
Version: 8.0 Beta
Arch: x86_64
Status: Subscribed
Status Details:
Starts: 23/11/18
Ends: 22/11/19

If you attempt running the same command as a regular user, you’ll probably need to authenticate (tell the root password) first:

[greys@rhel8 ~]$ subscription-manager list
You are attempting to run "subscription-manager" which requires administrative privileges, but more information is needed in order to do so. Authenticating as "root"
Password:
...

List all the available subscriptions in Red Hat

It may well be that you have multiple subscriptions available as part of your setup – for instance, you might have additional software installed that is maintained and supported by Red Hat, but uses separate subscription channel instead of being supplied with the default OS one.

You can use the same subscription-manager command to list all the available subscriptions:

[root@rhel8 ~]# subscription-manager list --available
+-------------------------------------------+
Available Subscriptions
+-------------------------------------------+
Subscription Name: Red Hat Developer Subscription
Provides: dotNET on RHEL Beta (for RHEL Server)
Red Hat Enterprise Linux for SAP
Red Hat Enterprise Linux Resilient Storage (for RHEL Server)
Red Hat Ansible Engine
RHEL for SAP HANA - Update Services for SAP Solutions
Red Hat Enterprise Linux Scalable File System (for RHEL Server) - Extended Update Support
RHEL for SAP HANA - Extended Update Support
Red Hat Container Images Beta
Red Hat Enterprise Linux Atomic Host Beta
Red Hat Container Images
Red Hat Enterprise Linux High Availability (for RHEL Server) - Extended Update Support
Red Hat Enterprise Linux Load Balancer (for RHEL Server)
Red Hat Container Development Kit
Red Hat Beta
Red Hat EUCJP Support (for RHEL Server) - Extended Update Support
RHEL for SAP (for IBM Power LE) - Update Services for SAP Solutions
MRG Realtime
Red Hat Enterprise Linux Load Balancer (for RHEL Server) - Extended Update Support
dotNET on RHEL (for RHEL Server)
Red Hat Enterprise Linux High Availability - Update Services for SAP Solutions
Oracle Java (for RHEL Server)
Red Hat Enterprise Linux Server - Update Services for SAP Solutions
Red Hat Software Collections (for RHEL Server)
Red Hat Enterprise Linux for ARM 64
Red Hat Enterprise Linux High Availability (for RHEL Server)
Red Hat Enterprise Linux High Performance Networking (for RHEL Server)
Red Hat Enterprise Linux Scalable File System (for RHEL Server)
Red Hat Enterprise Linux for Real Time
Red Hat Enterprise Linux High Performance Networking (for RHEL Server) - Extended Update Support
RHEL for SAP - Update Services for SAP Solutions
Oracle Java (for RHEL Server) - Extended Update Support
Red Hat Enterprise Linux Atomic Host
Red Hat Enterprise Linux Server - Extended Update Support
Red Hat Developer Tools (for RHEL Server)
Red Hat Software Collections Beta (for RHEL Server)
Red Hat Enterprise Linux Server
Red Hat Developer Tools Beta (for RHEL Server)
RHEL for SAP - Extended Update Support
Red Hat Developer Toolset (for RHEL Server)
Red Hat Enterprise Linux High Performance Networking (for RHEL Compute Node)
Red Hat Enterprise Linux Resilient Storage (for RHEL Server) - Extended Update Support
Red Hat Enterprise Linux for SAP Hana
Red Hat S-JIS Support (for RHEL Server) - Extended Update Support
SKU: RH00798
Contract:
Pool ID: 8a85f99a65c8a1016698f9e87423fe
Provides Management: No
Available: 16
Suggested: 1
Service Level: Self-Support
Service Type: Subscription Type: Standard
Starts: 21/10/18
Ends: 21/10/19
System Type: Physical

Pretty impressive, isn’t it? Can’t wait to try some of these out, Red Hat Developer Tools, Red Hat Container Images and Red Hat Enterprise Linux High Availability all sound fun!

See Also

- Find Out Red Hat version
- Red Hat Linux
- ScreenFetch in Red Hat Enterprise Linux 8
How To: Disable SElinux

SElinux – Security Enhanced Linux

If you’re using RedHat or CentOS Linux distros (or sporting a Fedora Linux desktop), you probably have SELinux enabled by default. SELinux is a Security-Enhanced Linux – a framework for securely managing processes, users and files on your RedHat OS.

Confirm current SElinux mode

Just run the `getenforce` command to see what the story is. Most likely it will say “Enforcing” which is really good – means
your OS is under solid protection:

[root@rhel8 ~]# getenforce
Enforcing

**Temporarily Disable SELinux**

If you need to disable SELinux just for a few minutes to debug some issue (mind you, there are better ways to debug than disabling SELinux!), you should use the `setenforce` command:

[root@rhel8 ~]# setenforce 0

As you can see, `getenforce` will now report that your system is running in a Permissive mode – not very safe:

[root@rhel8 ~]# getenforce
Permissive

**IMPORTANT**: This change won’t survive a reboot, so next time you restart your system it will come back with SELinux enabled and enforcing again.

**Permanently Disable SELinux**

If you’re serious about disabling SELinux altogether, you’ll have to do two things:

1. Update `/etc/selinux.png/config` file (change `SELINUX=enforcing` to `SELINUX=disabled`)
2. Reboot your Linux system

**See Also**

- `make iptables service a reboot`
- SELinux Reference
- Advanced Unix Commands
- Linux Commands